tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter

- (4) Red skin spots which are thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter.
- (5) Bitter pit or Jonathan spot when one or more spots affects the surface of the apple.
- (j) Insects: (1) Any healed sting or healed stings which affect a total area of more than three-sixteenths inch in diameter including any encircling discolored rings.
  - (2) Worm holes.

[67 FR 69663, Nov. 19, 2002; 67 FR 79517, Dec. 30, 2002]

## §51.318 Serious damage.

"Serious damage" means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detract from the appearance, or the edible or shipping quality of the apple. In addition, specific defect measurements are based on an apple three inches in diameter. Corresponding smaller or larger areas would be allowed on smaller or larger fruit. Any reference to "inch" or "inches in diameter" refers to that of a circle of the specified diameter. Any reference to "aggregate area," "total area," or "aggregate affected area" means the gathering together of separate areas into one mass for the purpose of comparison to determine the extent affected. The following specific defects shall be considered as serious damage:

- (a) The following types and amounts of russeting shall be considered as serious damage:
- (1) Smooth solid russeting, when more than one-half of the surface in the aggregate is covered, including any russeting in the stem cavity or calyx basin, or slightly rough, or excessively rough or bark-like russeting, which detracts from the appearance of the fruit to a greater extent than the amount of smooth solid russeting permitted: *Provided*, That any amount of russeting shall be permitted on Roxbury Russet and other similar varieties.

- (2) [Reserved]
- (b) Sunburn or sprayburn which seriously detracts from the appearance of the fruit.
- (c) Limb rubs which affect more than one-tenth of the surface in the aggregate.
- (d) Hail marks, drought spots, or scars, if they materially deform or disfigure the fruit, or if such defects affect more than one-tenth of the surface in the aggregate: *Provided,* That no hail marks which are unhealed shall be permitted and not more than an aggregate area of one-half inch shall be allowed for well healed hail marks where the skin has been broken.
- (e) Stem or calyx cracks which are not well healed, or well healed stem or calyx cracks which exceed an aggregate length of one-half inch.
- (f) Visible water core which affects an area of more than one-half inch in diameter.
- (g) *Disease:* (1) Scab spots which affect a total area of more than three-fourths inch in diameter.
- (2) Cedar rust infection which affects a total area of more than three-fourths inch in diameter.
- (3) Sooty blotch or fly speck which affects more than one-third of the surface.
- (4) Red skin spots which affect more than one-third of the surface.
- (5) Bitter pit or Jonathan spot which is thinly scattered over more than one-tenth of the surface.
- (h) *Insects:* (1) Healed stings which affect a total area of more than one-fourth inch in diameter including any encircling discolored rings.
  - (2) Worm holes.
- (i) Bruises which are not slight and incident to proper handling and packing, and which are greater than:
  - (1) % inch in depth;
  - (2) 11/8 inches in diameter;
- (3) any combination of lesser bruises which detract from the appearance or edible quality of the apple to an extent greater than any one bruise described in paragraph (i)(1) or (2) of this section.
- (j) Brown surface discoloration when caused by delayed sunburn, surface scald, or any other means and affects an area greater than ¾ inch in diameter.